

**HYBRID CAPITAL: PERSPECTIVES OFFERED BY THE DEEPLY  
SUBORDINATED NOTES FOR THE FINANCIAL AND NON-  
FINANCIAL COMPANIES**

**By**

**Madeline Cordero**

**THESIS**

Submitted to KDI School of Public Policy and Management  
in partial fulfillment of the requirements  
for the degree of

**MASTER OF BUSINESS ADMINISTRATION**

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## **ABSTRACT**

### ***Hybrid Capital: Perspectives Offered by the Deeply Subordinated Notes for the Financial and Non-financial Companies***

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*The increasing need from corporate sector and financial institutions for more effective means of financing is being reflected in a rapid evolution in the capital markets, where highly innovative financing structures are being constantly created. Hence, the development of hybrid financial instruments, that mixes features from equity and debt, is becoming a new tool of capital optimization. Furthermore, the introduction of the changes in the regulatory arena -as the revisions of the Bale Agreement of 1988 about the Equity Capital treatment and the revised version of the IAS32, that changes the accounting treatment of many preferred stock instruments-, contributed to the proliferation of deals using hybrid products. The investors find higher yields at a lower risk; and for the companies, they are a cheap and flexible form of capital. This paper targets to explain the reasons of the demand for this kind of product from a corporate finance point of view. In the same way it explores the mechanics and main features, the arbitrage opportunities and the treatment from the credit rating agencies. Finally, this work converges to the instrument called Deeply Subordinated Notes and describes its implementation in the French Financing System.*

**Areas:** Capital Markets, Corporate Finance

**Keywords:** capital structure, credit ratings, hybrid capital, deeply subordinated notes, financial flexibility, loss absorption, default.

**JEL Classification:** G21, G32, G33, H26

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2005**

*Dedicated to my mother, for her everlasting support, motivation, understanding and  
Love*

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## ***Introduction***

The productive activities of companies are financed either while reinvesting their profits or raising funds from external sources. Among these sources one finds several sorts of financial instruments: debt instruments as loans and other obligations; capital instruments as capital shares and preferred stock; derivative instruments, insurances and hybrid instruments.

The capital is raw material for the production activities of the companies. It is one of the factors of production described by the classic economist David Ricardo as "necessary to give effect to the work." The reward for the investor is what is known like opportunity cost. The capital also constitutes the first line of defense against a sudden fall of the company, while making possible the absorption of the uninsured losses and this way allowing the company in financial stress to continue its activities while avoiding the insolvency and protecting the creditors of a total loss in the worse of the cases. However, the capital stocks can execute this absorbing function solely if they are free to pay for the dividends or interests.

Since the capital stocks have a very big probability of losses, they become the most expensive source of capital. From the offer point of view, provision of the investment instruments is well below the demand of the financial institutions and institutional investors.

Consequently, in the present financial intermediation environment, managers aim the hybrid products, an instrument that behaves very much like debt so long as the company is a going concern, but becomes equity should the company go into liquidation. It is an efficient alternative to reduce their capital costs and to keep the financial flexibility of their operations if potential crises or potential opportunities of investment arise.

In that way during the last years, the stock market has been witness of the radical increase in the volume and the type of the hybrid financial products, of which their main characteristic is the combination of the elements of the stockholders' capital with those of the debt holders'. Globally, the main motives of this growth are the low cost of the hybrids after tax deduction and their acceptance by the banking regulators.

The hybrid products consist of an extensive range of notes that are nor pure debt nor pure equity. Typically, they are constructed to offer financial flexibility to the issuer as the one given by capital stocks, but avoid the dilution of the existing shareholders. The hybrid instruments represent a subordinated claim of funds and goods of the entity in relation with the debt senior. Issuers can delay the payments of dividends or interests, and the notes are estimated typically as lower rank than senior debt.

### ***Definitions***

**Return:** includes the aggregate of cash paid interest and/or dividend returns, and or the accrued interest and/or dividend returns (and whether the return is simple or compounded”). Also implies any capital gain expected from participation in any improvements to the company’s underlying equity price.

**Fixed Income Security:** An investment that provides a return in the form of fixed and known periodic payments and eventual return of principle at maturity.

**Interest:** service payments on debt instruments that fall outside the corporate tax base.

**Dividends:** service payments on equity that are seen as distributions of the corporate tax base.

**Non-cumulative:** when suspended dividends are not declared in a given period, they never have to be paid.

**Early Stage Seed:** The company does not yet exist, or is beginning to function. It has not yet started selling its product.

**Start-up:** The Company has finished developing a product, and needs financing in order to start production and distribution. It is not generating any profit yet.

**Expansion:** The Company is break-even or profitable. Funds are needed to raise productive and commercial capacity, to develop new products, and secure its cash

flows.

**Buy-out:** Funds whose strategy is to acquire other businesses. This includes leveraged buyouts, where the acquisition and subsequent growth is partly financed by debt.

**Venture Capital:** Refers to both early stage and expansion finance.

**Private Equity:** Refers to venture capital and buyouts.

**Callable bond:** gives the bond issuer the right but not the obligation to redeem its issue of bonds before the bond's maturity. As a result, the price of bonds is lower because the premium issuers must offer to the investors. In that case the best moment to exercise their right is when the interest rate is lower than the coupon rate and then the company can re-issue new bonds at a lower coupon rate.

**Convertible bond:** bondholders have the right but not the obligation to convert their bonds into equity shares at or prior to the bond's maturity.

**Special Purpose Vehicle (SPV):** also referred to as a "bankruptcy-remote entity" whose operations are limited to the acquisition and financing of specific assets. The SPV is usually a subsidiary company with an asset/liability structure and legal status that makes its obligations secure even if the parent company goes bankrupt.

**Preferred Stock:** A security that shows ownership in a corporation and gives the holder a claim, prior to the claim of common stockholders, on earnings and also generally on assets in the event of liquidation. Most preferred stock pays a fixed

dividend that is paid prior to the common stock dividend, stated in a dollar amount or as a percentage of par values. This stock does not usually carry voting rights. Preferred stock has characteristics of both common stock and debt and is viewed as an “inexpensive” form of equity. They are the first class of equity to participate in any liquidation proceeds. For that reason, preferred shares are usually the security of choice for many venture capital investors (essentially, they adopt a “last in, first out” philosophy respecting repayment of capital at liquidation). In addition, venture capital investors command a “liquidation preference” of two or three times their initial capital before other share classes can participate in any liquidation proceeds.

As well, for companies with an established cash flow, preferred shares may enjoy a dividend payment of, say 6% to 8%, which returns cash annually or otherwise accrues. It is also typical that the preferred shares include a redemption privilege or a punitive conversion rate to common shares. These latter provisions are intended to allow the preferred shareholders the means to assume control of the company under certain (usually adverse) conditions. A more complete discussion of typical term sheet clauses is provided elsewhere.

**Common Shares:** Common shares rank last in the event of a company’s liquidation.

They do not typically enjoy any dividends or any other form of annual cash return. By

contrast, common shareholders normally represent the largest single class of shareholders and, therefore, benefit the most from a company's capital appreciation.

**Options and Warrants:** Options and warrants normally allow the holder to purchase common shares in the future at a predetermined price. For a private company, it is not uncommon for lenders and investors of almost any other financial instrument to request warrants as a “sweetener” to a deal. Holders of these instruments may participate fully in the upside of a company's capital appreciation, without risking any capital until the outcome is certain (i.e. one would only exercise the option or warrant if the share price had increased).



## ***A review of Corporate Finance***

In the corporate finance field, the question about how to allocate the capital into debt and equity in order to maximize the firm value has been addressed by several theories and practitioners. The Miller Modigliani theory was spread out among scholars, with its variations and main propositions, but in practice other proposals have more proof of being implemented by companies, such as the use debt in their financial decisions with the purpose of balancing the tax shields resulting from greater debt versus the costs of financial distress, or the pecking order or trade-off capital structure. The theories of agency cost and information asymmetry had been debated, but executives today are very concerned about financial flexibility and credit ratings when issuing debt, and earnings per share dilution and recent stock price appreciation when issuing equity<sup>1</sup>,

In the case of the pecking order, firms would prefer debt than equity (because taxation policies for calculating taxable income allow the deduction of interest payment but not dividends, therefore lowering their after-tax cash flow<sup>2</sup>), however, they would prefer to use internal financing through retained earnings than outside financing.

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<sup>1</sup> John R. Graham and Campbell R. Harvey, The theory and practice of corporate finance: evidence from the field. Journal of Financial Economics Volume 64, Issue 2, May 2002, Pages 181-214

<sup>2</sup> Michael J. Barclay and Clifford W. Smith, Jr. The capital structure puzzle: another look at evidence. University of Rochester

The normal two ways of raising equity capital were issuing new shares or using retained earnings, the later implying opportunity cost for the shareholders. In the capital budgeting process that affects the WACC, given by:

Cost of common stock

$$r_E = r_{RF} + b_E(r_M - r_{RF})$$

Cost of debt

$$r_D - (1 - t)Y_D$$

Cost of capital WACC

$$WACC = w_D r_D + w_E r_E$$

From this perspective, the value of the firm is given by the ability in the creation of free cash flow:

$$\text{Firm's Value} = \frac{FCF_1}{(1+WACC)} + \frac{FCF_2}{(1+WACC)^2} + \dots = \sum_{t=1}^{\infty} \frac{FCF_t}{(1+WACC)^t}$$

Then again, too much and not urgent debt also will work against further leverage and will affect their credit ratings. Moreover, the cash flow is riskier in a leveraged firm than in an un-leveraged one. That is why the magnitude in using

hybrid capital as an innovative product and an efficient financing source for the firm controlling its capital structure.

| SAFEST |                     |                                                                                          |
|--------|---------------------|------------------------------------------------------------------------------------------|
|        | <b>Debt</b>         | Secured liabilities<br>(term loans,<br>credit facilities)                                |
|        |                     | Unsecured                                                                                |
|        | <b>Quasi-Equity</b> | Structure and<br>return is based<br>on a mix<br>between debt<br>and equity<br>attributes |
|        | <b>Equity</b>       | Preferred shares                                                                         |
|        |                     | Common shares                                                                            |

FIGURE 1: CAPITAL SAFETY RANKING

### *Equity features*

Taken as a reference Fitch's criteria<sup>3</sup>, we can introduce the main characteristics of equity, the most flexible form of capital as follows:

- *No maturity*: the issuer is not required under any circumstance to return common equity capital to the investor. Voluntarily, they can do it as a choice through share repurchases.
- *No fixed periodic payments*: there is not an obligation of payment to pay regular dividends and there is no event of default if the dividends payments are stopped. Companies attempt to pay dividends with a periodicity in order to

<sup>3</sup> Keith Buckley, Ellen Lapson and Philip Walker. Hybrid Securities: Evaluating the Credit Impact. Corporate/Financial Services. October 26, 2001

avoid sending a negative message about the company's performance to shareholders.

- *Most junior ranking:* because of its ranking, common equity acts as the “ultimate source for loss absorption” in the case of a financial crisis. It also contributes to the financial flexibility of company because it aids to credit quality of a company as a source of meeting their obligations. As a result it also contributes to the financial flexibility of the company, allowing it to take additional leverage.

### ***Debt features***

In the case of straight debt, its main features are:

- *Fixed maturity:* all debt requires to be paid at maturity or in fixed installments.

In consequence companies need to fund those reimbursements with cash flow or through refinancing. In the case of financial distress the liquidity risk for the issuers is higher since it obstruct the access to capital markets.

- *Fixed payments:* issuers must pay accrual interest to debt holders, which are paid periodically. If failure to pay those interests, the company faces an event of default. Therefore the neediness of the company to continuously generate cash flow to meet those obligations.

Hence, the agency problem is that for the stockholders the debt holders can be exposed to maximum risk because they share the potential losses but their return from the risk exposure is limited.

### ***The Basel Agreement and the Tier 1 Capital***

Otherwise, the treatment of capital was discussed at the time of the adoption of the Basel Agreement in July 1988. In the first drafts of the agreement, Tier 1 capital got along as the totality of the equity funds, because it is the only element of the capital stocks that is completely available to cover the risk of the company. However, for political reasons associated to the modest sources of finance in the banking system of the United States, the definition of Tier capital 1 was spread in the last clause to include the non-cumulative capital. In spite of it, the amount of issuance of the preferred stock in the United States has been limited for several years. In 1996 the Federal Reserve published a declaration that approves the use by commercial banks of "certain instruments of cumulative preferred stocks" as capital Tier 1. These instruments are known as Trust Preferred Securities (TPrS) and several other acronyms. The Federal reserve had several requirements so that such instruments can qualify like Tier 1: in particular they must procure a minimum of one period of five years of the consecutive postponement for the distributions of the preferred stockholders; the inter-company loan between the issuer of the SPV to the holding

company must be subordinated to the whole subordinated debt and must have the longest maturity; the amount of these instruments, with the other actions of preferred stock that a holding company can include in the fundamental Tier 1 capital, is limited to a 25% of the Tier 1. The main attraction of such instruments is that, as well as qualified like Tier 1 they are efficient in term of the taxes. It is in October 27, 1998, that the Committee of Basel makes the most importing declaration in the paragraph 4:

"With the purpose to protect the integrity of the Tier 1 Capital, the Committee determined that the interests of the minority in the consolidated subsidiaries accounts that take the shape of Tier 1 should be included solely in Tier 1 Capital if the underlying instrument satisfied to the following requirements that, to the minimum, must be accomplished by all instruments included like Tier 1 Capital:

- Fully issued
- Non cumulative;
- Capable to absorb the losses of the bank on a continuous basis;
- Minor depositors, general creditors and debts of lower rank of the bank;
- Permanent;
- That is not assured either covered by a guarantee of the issuer or related entity, either other arrangement that legally or economically heighten the priority of the demand vis-à-vis the creditors of the bank; repayable by the initiative of the issuer

only after a minimum of five years with regulators approval and under the condition that it will be changeable with the capital of the same or better quality, unless the regulator determines that the bank has the capital that is more than adequate to take the risks involved."

Particularly in the instance of financial institutions, the Basle agreement is an effort by industry and regulators for preventing a potential financial collapse, to establish international standards for the wise regulation of banks, since they tend to maximize investors profits by maximizing risk. The interest of shareholders that creditors expose pushes the risk in the global economy and the domino effect in a possible crisis.

The Basle accord seeks to ameliorate this risk by having central banks agree, among other things, to impose on their resident banks certain minimum capital standards. These standards require of banks that they maintain a certain amount of capital capable of absorbing losses without threatening the continued existence of the institution. The best and most expensive form of capital is known as Tier 1 Capital, which consists mainly on common shares, retained earnings, and loss-absorption reserves. The 1998 Basel Agreement allowed banks to include hybrid instruments as Tier 1 if they respected the criteria mentioned above.

## ***The Constituents of Capital<sup>4</sup> according to Basle agreement***

In order to have a better idea on how Basle agreement is incorporated to the national standard procedures, let's see the example from the French Bank Committee explaining the constituents of Capital:

### ***Core Capital Tier 1***

Core capital ("Tier 1") includes:

- Ordinary shares/common stock and certificates of investment
- Non-cumulative preferred shares (Article L228-11 of the *Code de Commerce*) and preferred
- Certificates of investment, excluding preferred shares without voting rights (Article L228-12)
- Deeply subordinated notes issued under the conditions set in the article L.228-97 of the Code de Commerce, revised by the Financial Security Law dated August 1, 2003, with the prior consent of the *Secrétariat Général de la Commission Bancaire* and provided that these notes meet the eligibility criteria for Tier 1 as defined in Annex 17
- Consolidated reserves (excluding revaluation reserves)

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<sup>4</sup> *Commision Bancaire – General Secretariat. Methods for Calculating International. Office of International Affairs. Paris, February 13, 2004.*



- Retained earnings
- Undistributed earnings (if not yet approved by the general shareholders' meeting),
- Positive goodwill
- Differences arising from consolidation by the equity method
- Minority interests
- Positive foreign currency translation reserves
- Reserve for general banking risks (“fonds pour risques bancaires généraux”) as defined in the Governors' agreement of November 6, 1991.

The following elements are deducted from Core Capital:

- Holdings of own shares
- The unpaid portion of capital
- Accumulated losses
- Formation expenses
- Intangible assets (excluding leaseholds)
- Negative goodwill
- Minority interests in loss-making units
- Negative foreign currency translation reserves

### ***Supplementary Capital or “Tier 2”***

Supplementary capital may be included only up to the limit of 100% of core capital.

A distinction is drawn between upper Tier 2 capitals and lower Tier 2 capital.

The following elements may be included in supplementary capital:

#### **Upper Tier 2 Capital**

- Revaluation reserves;
- Unrealized gains on holdings of marketable securities. A discount of 55% is applied, line-by-line, to the difference between the market price of the securities and their price of acquisition, in order to take into account the potential volatility of share prices and the notional tax charge on gains;
- General provisions; general provisions not held against materialized and measurable losses may be included in supplementary capital up to a limit of 1,25% of risk-weighted assets;
- Guarantee funds, under the conditions set in Regulation n° 90-02 of the *Comité de la Réglementation Bancaire*;
- Hybrid capital instruments (including subordinated bonds which are convertible or redeemable only in shares) that meet the following four conditions:

- They are subordinated in capital and interest and are fully paid up,
- They are perpetual and cannot be redeemed except at the initiative of the issuer and with the prior consent of the *Secrétariat Général de la Commission Bancaire*. Under no circumstances should a request for redemption be made before a period of five years has elapsed, unless the redeemed borrowings are replaced with capital of equal or better quality.
- They include a clause giving the borrower the right to defer the payment of interest in the event that the profitability of the banks renders their payment inadvisable,
- They are available to cover losses without the bank being obliged to cease operations.

The following cumulative limits apply, subject to approval by the *Secrétariat Général de la Commission Bancaire* on a case-by-case basis:

- The interest rate cannot increase by more than 75 basis points at a time;
- The increase cannot exceed 75 basis points in a five-year period; however the combination of two five-year periods is acceptable, yielding a maximum increase of 150 basis points in the tenth year of the borrowing.
- The interest rate cannot be more than 250 basis points above the yield on a

government bond. These limits are computed in terms of the market conditions prevailing at the time of issuance. If the reference rate changes, the size of the step-up is measured by combining the spread over the variable rate to which it is indexed (PIBOR, LIBOR, or similar reference rate) with the swap rate quoted at the time of issuance between that reference rate and the initial reference rate.

### Lower Tier 2 Capital

This category includes term subordinated debt instruments whose initial maturity is greater than or equal to five years, with the application of a annual amortization once the residual life of the instrument falls below five years. Early redemption of these instruments is permitted, with the approval of the *Secrétariat Général de la Commission Bancaire*. However, under no circumstances should a request for redemption be made before a period of five years has elapsed, unless the redeemed borrowings are replaced with capital of equal or better quality. Furthermore, redemption must not occasion payment of compensatory indemnification by the borrower.

- Subordinated debt that is convertible to or redeemable in shares or cash is treated as equivalent to shares or cash.
- For the rate of amortization in the last five years of a subordinated debt instrument, two cases are possible. For instruments that are redeemed in full at maturity, the

amortization is set at 20% per year. For instruments that are redeemed on a predetermined annual schedule, the security or subordinated loan is broken down into as many pieces as there are redemption dates and a linear discount of 20% per year is applied to each piece.

### ***Tier 3 Capital***

Tier 3 capital consists of subordinated loans whose initial maturity is greater than two years, which do not carry guarantees, and which satisfy the following conditions:

- The loan must be fully paid out, and the loan contract must provide that the loan cannot be redeemed before the agreed maturity without the approval of the

*Secrétariat Général de la Commission Bancaire;*

- Neither interest nor principal on these subordinated loans may be paid if it would result in the institution no longer satisfying its minimum capital requirement.

Upper Tier 2 capital that is above the ceiling applied in calculating capital requirements for credit risk is eligible without restriction for inclusion in Tier 3 capital.

Lower Tier 2 capital that is above the ceiling applied in calculating capital requirements for credit risk is eligible only if it strictly satisfies the conditions stated above. Furthermore, the amortized portion of lower Tier 2 capital discounted the last

five years may not be included in Tier 3 capital.

- Tier 3 capital may be used to cover market risk within certain limits, as set forth in

Part of this Notice.

There is no a recipe about how to reach a capital optimization, however ABN

AMRO describe it as follows<sup>5</sup>:

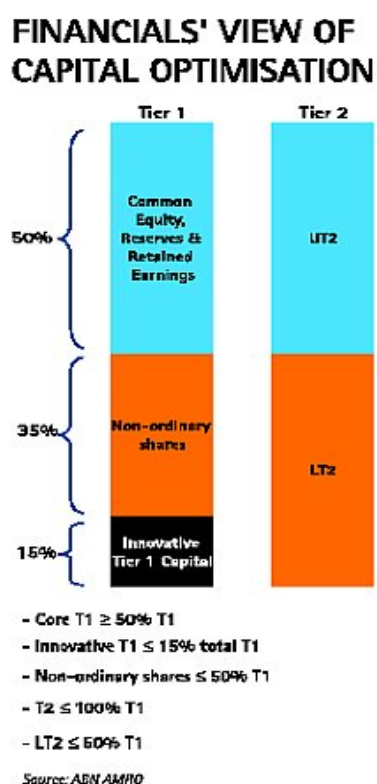


FIGURE 2: FINANCIALS' VIEW OF CAPITAL OPTIMISATION. SOURCE ABN AMRO

<sup>5</sup> The presentation of this figure has illustrative purposes. It is not in the intent of the author to discuss their argument, which can be the topic of a future research.

## ***Hybrid Products***

The tendency by firms and financial institutions of making use of debt, finds its purpose of gaining the higher return that offers the commensurate higher risk of lower liquidity.

Among the recent developments, the American ones, driven by commercial and regulation issuers in the United States, have restructured substantial amounts of hybrid securities due to the constant weak interest rates, to the changes in the accounting rules and the rectification of the regulating treatment of banks for the preferred stock with stockholders' capital. The new accounting declaration of the financial Committee (SFAS 150) and the FASB interpretation (FIN) 46r, changed some hybrids reflected before as preferred stock to be shown as ordinary stocks. Another change in the American Taxation Law of 2004 lowered the income tax on received dividends, while reducing without eliminating the tax advantage of some types of relative hybrids.

In Europe and in Australia, the hybrids bond issue increased because of the improved business climate in these regions and their economic expansion. In Europe, the new issuance has been dominated mainly by banks that satisfy the standards usually used by the regulating banks and the insurance companies, about the Tier 1 and of the Lower Tier 2 (LT2), that are controlled more and more. The Australian

corporations issued more exceptional hybrid products, including some with exotic structures and features.

The result is an innovative financial instrument that becomes equity if the company goes into liquidation but, acts as debt in a continuous base. In this way, banks can be a little relieved from the excessive capital requirements imposed by regulators, through the issuance of hybrids, reducing substantially their cost of capital.

***The relationship vis-à-vis debt and equity***

The hybrid characteristics that relate them with equity are:

- No maturity or very long dated.
- No on-going payment obligation.
- Serve as a loss absorption cushion.

The characteristics that relate them with debt are:

- Regular and fixed service payments
- Little capital appreciation



| <b>Hybrid and Preferred Stock: Factors in the Debt-Equity Continuum</b> |                                                                                 |                                                                                                                                           |                                                                                                                                                                                                  |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Factors</b>                                                          | <b>More Debt-like</b>                                                           | <b>Debt and Equity Elements</b>                                                                                                           | <b>More Equity-like</b>                                                                                                                                                                          |
| I. Periodic payments of interest or dividends                           | Fixed payments without deferral mechanism (or short remaining deferral period.) | Long remaining deferral option (at least 4 - 5 years) or no limit on deferral.                                                            | No contractual periodic cash payments; or periodic payments contingent on financial results.                                                                                                     |
| II. Redemption of principal                                             | Fixed redemption or maturity in the short or intermediate term.                 | Fixed redemption date with extremely long remaining term to maturity (40 + years).                                                        | Perpetual issue (no repayment of principal); or mandatory conversion into common equity at fixed exchange rate or limited range of exchange rates; or conversion into common at issuer's option. |
| III. Subordination; Creditor rights                                     | Ranks equally with senior debt.                                                 | Debt explicitly subordinated to all senior and subordinated debt; default on interest or principal does not permit holders to accelerate. | Only claim in bankruptcy is as a holder of preferred or common shares; default on interest or principal does not permit holders to accelerate.                                                   |

*Table 1: Hybrid and Preferred Stock: Factors in the Debt-Equity Continuum. Source Fitch*

Firms are looking at them because the subordinated nature of the hybrid security. It is essential since it act as a cushion to senior debt in bankruptcy. Another driver is the tax deductibility of the coupon payments. Similarly, the impact of the fair value accounting treatment in the income statement

For the investor, the returns are very attractive. The subordinated creditor accepts that has no rights to receive or retain payments from the debtor until senior creditors are fully paid. Contrary, it also increases the tax paid by debt holders, so they require a premium in the form of higher yields.

Regarding compensation, it is riskier than expected, and then the option portion of the hybrid gains value as the note portion loses value. Conversely, if the company turns out to be less risky than expected, the note can be expected to gain

value as the option loses value. The inverse correlation will not be exact but it ought to be sufficient to moderate some of the volatility of investments in risky situations.

### ***Types of Hybrids***

The general classification of hybrid securities according to FITCH is:

- Traditional preferred stock
- Optionally convertible securities
- Deferrable instruments
- Mandatory convertible securities
- Trust preferred securities

#### **1. Traditional Preferred Stock**

This is the first type of hybrid instrument, even though its high after-tax cost makes from it a less attractive instrument recently. It is issued by the parent holding company. Among its main characteristics we can find:

- *Perpetual or long-dated maturity:* similar to what happens with common equity capital, for this kind of hybrid there is not refinancing or repayment risk because it has no maturity or some have

maturities that exceed 50 years.

- *Dividend:* preferred stock normally pays dividends at a set coupon rate, auction-set or a money market reference rate. Often the suspension of the dividends' payment is non-cumulative, however in some cases dividends will accrue, even though the issuer has the right of suspending them without causing a corporate default. Those unpaid dividends must be fully paid before common stock dividends are restored.

- *Deep Subordination:* the rank of a preferred stock is junior to senior or subordinated debt, being only senior to common stock. Hence, its function as a cushion for absorbing losses.

## **2. Deferrable Securities:**

They can be perpetual or be very long dated. Normally the no-call period is very long. Some early calls may be permitted in the case the issuer “issues junior or parity securities to the hybrid bonds”, but it would have to pay a make whole. This is one feature that makes this kind of security attractive given the popularity of share buybacks, while aiming a cost-effective capital structure.

- *Covenants:* they are non-existent or are restricted to a negative pledge. Even if there are no events of default, insolvency can trigger early mandatory redemption. If senior notes covenants were used, the security will

lose its equity allocation from rating agencies. Hybrid bonds assume subordination to senior debt and pari passu with other deeply subordinated obligations.

– *Coupon and deferral mechanics:* coupons are high and can step-up<sup>6</sup> “if there is not a call made before the 10<sup>th</sup> anniversary”. If the step-up goes beyond 100bp, it can be perceived as a disincentive to keep the security in the balance sheet; therefore, it may trigger a loss of equity allocation. After the 10th anniversary, coupons can switch from fixed rate to floating rate. The issuer can have the option of a coupon holiday event up to five years, if there is failure or no redemption while paying dividend on the equity or coupon on parity securities. The unpaid interest can be lost, cumulative or payable after coupon date.

### **3. Trust Preferred Securities**

Typically, in Europe this kind of securities is perpetual and in the US they have maturities of 30 years. In US, they can be callable after 5 years. The issuer has the option to defer the coupon payments, which sometimes can be cumulative. The company that wants to raise capital through this structure sets up a trust corporation. That trust will issue debt or preferred stock and with the resulting proceeds, will buy a

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<sup>6</sup> A security that pays an initial coupon rate for the first period, and then a higher coupon rate for the following periods, the coupon steps up from 3% the first 5 years to 7% the following years, per example.

deeply subordinated bond issue by the company. The structure introduces the use of the Special Purpose Vehicle.

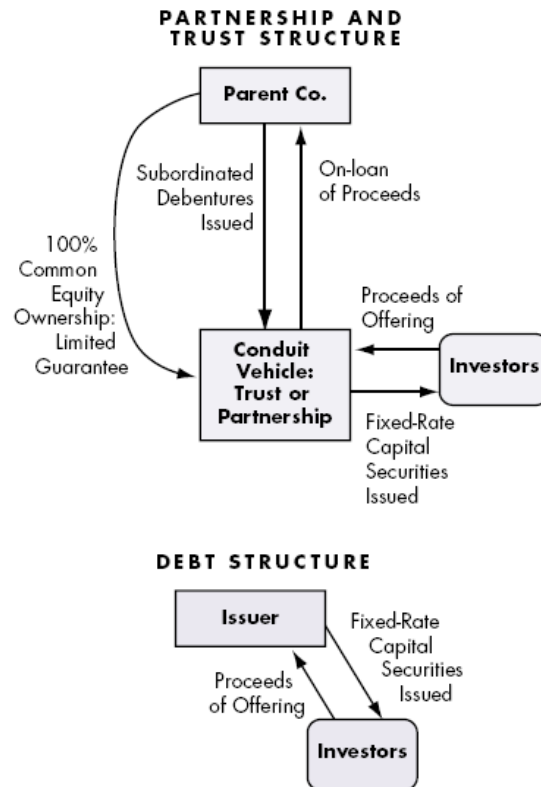


FIGURE 3: SPECIAL PURPOSE VEHICLE. SOURCE FIXED-RATE CAPITAL SECURITIES. THE BOND MARKET ASSOCIATION, 2001

#### 4. Mandatory Convertible Securities:

The main difference of this form of hybrid in relation with the above explained, is that “traditionally they require principal repayment with common equity consideration”. In the present the investor can settle the deal by surrendering the bond or paying cash from equity sold through a forward contract. The maturity is shorter

than in the case of a traditional deferrable security, applying normally 5 years for the bond and 1 year for the forward contract. Usually contains no optional issuer call.

## **5. Optionally Convertible Securities**

These securities can convert into equity of the issuer at the investor's option. Also the issuer will have early call rights as a means of forcing a conversion, but issuer calls in early years are prohibited. And finally, the coupon is usually lower than the coupon for senior notes since investors have the option to participate in the equity upside.

As a partial conclusion, it must be denoted the essential particularities from hybrid products that make them attractive: they can be structured to meet the issuer's particular tax, accounting or regulatory requirements. Also, they can be adjusted in order to hold more equity characteristics to achieve expected rating from agencies or to relieve pressure on covenants. The they paid coupons (cumulative or non-cumulative) are tax-deductible.. They provide financial flexibility and control “over whether they roll the securities, redeem them or let them convert into equity.”

### ***Deeply Subordinated Notes***

The deeply-subordinates notes (DSN) are hybrid products, midway between the debt and the equity capital. The principle is the repayment of these securities after meeting obligations of the other creditors. The lenders of such securities commit that their credit ranking is subordinated to those of the other present creditors.

The DSN are fundamentally bonds that are subordinated to all other debts of the company. In other words, if the issuer faces bankruptcy, the major creditors (lenders of bank and possessors of the senior bonds) will be the first paid, and the creditors of the subordinate debt will come to be repaid later. These subordinate creditors will be repaid solely if the balance is enough after these investors in senior debt were entirely paid, although they rank above common stock holders, who just get anything that is left after all debts are paid. The subordinate creditor agrees that he will not have any right to receive or keep the creditor's payment until the senior creditors are completely paid.

Since the deeply-subordinates notes are in a phase in between that of capital stocks and debts, to better understand the general advantages of the DSN, one could say that the main assignment of the equity capital for the issuer is that they provide a high-level of financial flexibility. From the credit perspective, they don't need to be reimbursed in pre-determined deadline, since there is not a situation where the firm

must reimburse the capital invested to the stockholders; even though they can make stock repurchases, it is an absolutely voluntary act. In the same way, some periodic payments don't exist as in the cases of the coupon bonds, and there is no right to claim them if the payment of the dividends is suspended.

In the event the company stops the dividends payment, it is going to result in a bad impression for the shareholders, then, the companies have flexibility to use this mechanism if there is a lack of the cash in case of crisis. Similarly, in the case of the DSN, a claiming right doesn't exist if the interests are differed.

Additionally, the participating stocks have the latest rank between all stocks and act as the ultimate source for absorption of the loss. As it was mentioned earlier, they help to improve the total credit quality of the firm given its capacity to meet all other obligations.

Therefore the DSN share with the common stock their particularity to be a shape of financing instrument that admits a company to take supplementary leverage, and substantially help again their financial flexibility. In case of liquidation, the common stock will not generally recover a value unless all creditors and the preferred stockholders had their investments repaid.



| PRIORITY OF CLAIMS                        |
|-------------------------------------------|
| SECURED DEBT HOLDERS                      |
| UNSECURED SENIOR DEBT HOLDERS             |
| OTHER UNSECURED SUBORDINATED DEBT HOLDERS |
| FIXED-RATE CAPITAL SECURITIES HOLDERS     |
| PREFERRED STOCKHOLDERS                    |
| COMMON STOCKHOLDERS                       |

FIGURE 4: PRIORITY OF CLAIMS. SOURCE *FIXED-RATE CAPITAL SECURITIES. THE BOND MARKET ASSOCIATION, 2001*

In contrast, for the issuer, the debt is generally little advantageous from a perspective of the credit quality. Two features less attractive of debt are their fix maturity, and the need to cover the obligation with cash or through the refinancing, generating liquidity risk for the issuer. The risk is higher if the issuer meets any types of financial or operational stress that limit the capital cash flow and would be an obstacle to reach the stock markets for a refinancing. On the other hand, all sorts of debt accumulate some interests. In most cases, the interest is paid in the form of cash money periodically, and a failure to pay constitutes an event of default. Therefore, there is a progressive need for the company to produce free cash flow to respect the payments in the corresponding dates.

While the debt adds risk to the financial structure, it can have some advantages in financing with it. Typically not only the debt offers some lower final cost than the

common or preferred stocks after taxable deduction, but also, the indebtedness in the structure of funds can lead to highest returns for the shareholders. The optimal structure of funds in a perspective of the risk/return is the one that includes a combination of debt and capital stock that take in consideration the volatility of the cash flows produced by the productive activities of the company. This principle of corporate finances implies the one of diversification that is one of the pillars in the construction and funds allocation in investment portfolios for the mutual funds investors per example. The highest level of the operative capital flows relative to the capitalization, and lower to their volatility; the biggest is the capacity of the issuer to increase leverage to the combination of funds of total financing without wounding its quality of the total credit considerably. It can be advantageous for an issuer to use hybrid stocks as the deeply subordinated notes to help balance the risk and the return in the structure of funds. For the subscribers, the risk premium on the DSN has to be more than the one of the ordinary obligations as the result of the risk taken over the potential loss of funds, loss of the coupons and again the delay in the payment of the interests.

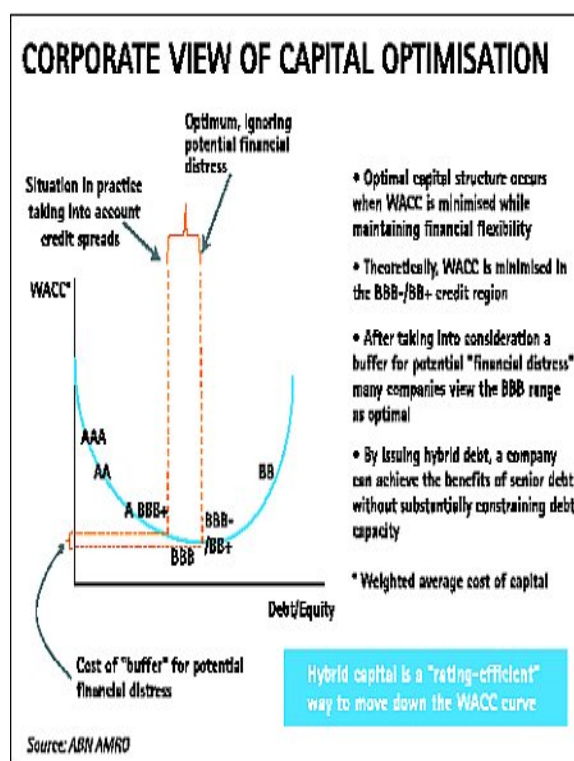


FIGURE 5: CORPORATE VIEW OF OPTIMAL OPTIMIZATION. SOURCE ABN AMRO

Since a deeply subordinated note is classified between debt and capital in the structure of the capital of the issuer, they are part of the one called hybrid capital or stocks hybrids. They usually have a perpetual maturity, or merely of long length, but can be repaid after several years, (often 10 years) and unlike the normal bond, they allow the issuer to postpone the interest payments without being technically default. As it was mentioned, it is because of this higher risk for the investors, they carry orderings of lower solvency at the rating agencies and must pay for higher coupons that the debt senior of the same issuer.

In this consideration, the rating agencies for their notations worry about the absence of capital that could put the society in default, the obligatory repayment absence to one pre-fixed date and the effect tampon for the other creditors in case of

default. They contribute nevertheless to the financial flexibility of the rating agencies, of which their assessment can improve by the financial strengthening of the issuer's balance.

For the investors who search for higher yields, they offer some returns to a relative low risk level. Such is the appeal of these products to the issuers and the similar investors; these hybrids count for example for now 15-20% of the yearly issuance in Australia. The capital resources as preferred stocks and other hybrids, carrying access to the capital, expensive and involving complex installations, are often achieved by a mediator of an ad hoc vehicle (SPV) domiciled to the United States or Luxemburg.

The flexibility of the hybrids allows the issuers to reduce the cost of financing by debts while introducing more exposure to the capital stocks. Although, if they are structured well, they are going to allow these capital stocks to be issued with a premium in the future, of the sort that they are going to reduce the cost of the capital stocks too. By consequence, it becomes easier to get loans of the banks and the other institutions thanks to the agreement of subordination.

Otherwise, the related interests of the DSN are paid to the investors if the firm has profits that would not be re-invested or pay interests to the holders. In the contrary case, the payment of the interests can be deferred. The subordinate obligations will

apply a higher interest rate than an instrument of a more standard debt. However, since they rank above other categories of capital, and have a yearly return that is paid cash, the subordinate obligations require an interest rate that is typically somewhat less than the rate of return of the stockholders' capital.

From the tax point of view, they are a viable means for the financial institutions in the United States, as soon as the deeply-subordinated stocks permit to get instruments of efficient and profitable financing because of the fiscal deductibility of the coupon.

These fundamental instruments provide to the issuing company the capacity to absorb some losses at the time of a liquidation and on a continuous basis, given that these securities classify as last rank obligations in relation with the other liabilities of the firm and additionally they offer the issuer the capacity to defer the payments. The subordination of last rank results to that the DSN can have a function of shock absorber for senior creditors in case of liquidation of the issuer, when the losses won't have been absorbed by the common stock. Therefore, they become very meaningful instruments from a prudential viewpoint for the financial institutions, because they function like an insurance against the losses instead of increasing their liabilities.

The DSN can also contribute to the financing of an acquisition, as it is the case of the issuance of the CNCE to purchase CDC Ixis. The DSN interest like instruments

of financing specially in the financial companies, since in agreement with the agreement of Basel II, they must finance their involvement in other credits establishments with their own funds. The DSN contribute to the consolidation of some acquisitions of which the acquisitions by loan, because the acquisition and the growth are financed in part by the debts and by the expansion of the productive activity or, by the application of the management of the capital, as the strengthening of the balance sheet and debt/equity ratio. In this sense, the DSN being rank above all classes of preferred and common stock, the institutions are going to consider these subordinated obligations like capital stock in order to calculate several asset ratios, as the loss ratio or the expense ratio.

The advantages for the financial institutions align variously of the other kind of institutions because of their nature and working. The financial institutions are controlled by regulations concerning the guarantees of their reserves, the monetary policies, the allocation of the obligations, the protections of the consumers, protections to the investors and the entry regulations. The main assets for the financial institutions are liabilities for the corporate companies of the other sectors. In such manner, the assets that create the economic profitability are the instruments of debt, which imply very meaningful risks because their profit depends on the capacity of payment of the subscribers. In 1998, the local banks in the United States, frustrated by

the foreign competition, began to drive financial activities overseas for issuing subordinated securities.

Therefore, it is by this constraint required by their regulators to keep a certain amount of their capital as reserve against the risks of their loans and investments, which the regulators allowed them to use the deeply subordinated notes to contribute to the risk capital. (Otherwise they should issue new stock, which will carry on shares).

| <b>Sources and uses of funds in nonfinancial corporations</b> |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                    |
|---------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|
| Percentages of each year's total investment                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                    |
|                                                               | 1990             | 1991             | 1992             | 1993             | 1994             | 1995             | 1996             | 1997             | 1998             | 1999               | 2000               |
| 1 Capital expenditure                                         | 87.1%            | 104.5%           | 87.5%            | 87.3%            | 83.2%            | 77.6%            | 87.6%            | 81.0%            | 89.1%            | 80.4%              | 86.6%              |
| 2 Investment in net working capital and other                 | 12.9%            | -4.5%            | 12.5%            | 12.7%            | 16.8%            | 22.4%            | 12.4%            | 19.0%            | 10.9%            | 19.6%              | 13.4%              |
| 3 Total Investment                                            | 100.0%           | 100.0%           | 100.0%           | 100.0%           | 100.0%           | 100.0%           | 100.0%           | 100.0%           | 100.0%           | 100.0%             | 100.0%             |
| Total Investment, in billions                                 | <b>\$ 498.00</b> | <b>\$ 412.00</b> | <b>\$ 517.00</b> | <b>\$ 567.00</b> | <b>\$ 754.00</b> | <b>\$ 789.00</b> | <b>\$ 755.00</b> | <b>\$ 880.00</b> | <b>\$ 872.00</b> | <b>\$ 1,116.00</b> | <b>\$ 1,162.00</b> |
| 4 Internally generated cash                                   | 86.8%            | 108.6%           | 90.0%            | 90.2%            | 87.7%            | 78.6%            | 89.5%            | 82.7%            | 85.7%            | 72.1%              | 76.7%              |
| 5 Financial deficit                                           | 13.2%            | -8.6%            | 10.0%            | 9.8%             | 12.3%            | 21.4%            | 10.5%            | 17.3%            | 14.3%            | 27.9%              | 23.3%              |
| <i>Financial deficit covered by</i>                           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                    |
| 6 Net stocks issues                                           | -12.7%           | 4.4%             | 5.2%             | 3.8%             | -6.9%            | -7.4%            | -9.2%            | -13.0%           | -30.6%           | -12.9%             | -14.3%             |
| 7 Net increase in debt                                        | 25.9%            | -13.0%           | 4.8%             | 6.1%             | 19.3%            | 28.8%            | 19.7%            | 30.3%            | 45.0%            | 40.8%              | 37.6%              |

Source: Table 102, Nonfarm, nonfinancial Corporate Business, Board of Governors of the Federal Reserve System, Division of Research and Statistics, Flow of Funds Accounts

Table 2: Sources and uses of funds in non-financial corporations. Source Federal Reserve

The hybrids as deeply-subordinates notes are very common for borrowers as the banks and the insurance companies, but it is not again one very established market. The investors are worried because a non-financial issuer, without an urgent need to maintain a regular access at the hybrids market, will not be so prudent as to not place

investors in a risk.

The companies only began lately to issue DSNs. They bring some advantages similar to the financial institutions, they can fortify their solvency for the rating agencies, for example, or to increase funds to make an acquisition without giving out new funds. A lot of these advantages came because the agencies of the evaluation consider these agreements in part debt and in part equity. For example, the recent note issue by Vattenfall has been considered by Moody's 75% capital and only 25% debt, and by Standard & Poor's 60% capital and 40% debt.

The company received some cash but it doesn't have increased in any manner its level of leverage as if it had borrowed an equivalent amount of senior debt merely. The hybrids had tendency to be issued by companies who preferred not to be in the stock market because they felt that the course of their shares was too low; or by companies without the sufficient strength in the balance sheet to have the debt as source of finance in a profitable manner. For the corporate companies this represents a cheap and flexible form of capital. In 2003, many companies used the hybrid capital selectively as the DSN to complete their operations: DONG in Denmark, Union Fenosa in Spain, Vattenfall in Sweden, Sudzucker and Linde in Germany, Casino Guichard and Michelin in France for example<sup>7</sup>.

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<sup>7</sup> See in the appendix table with a detailed example of recent DSN issuance



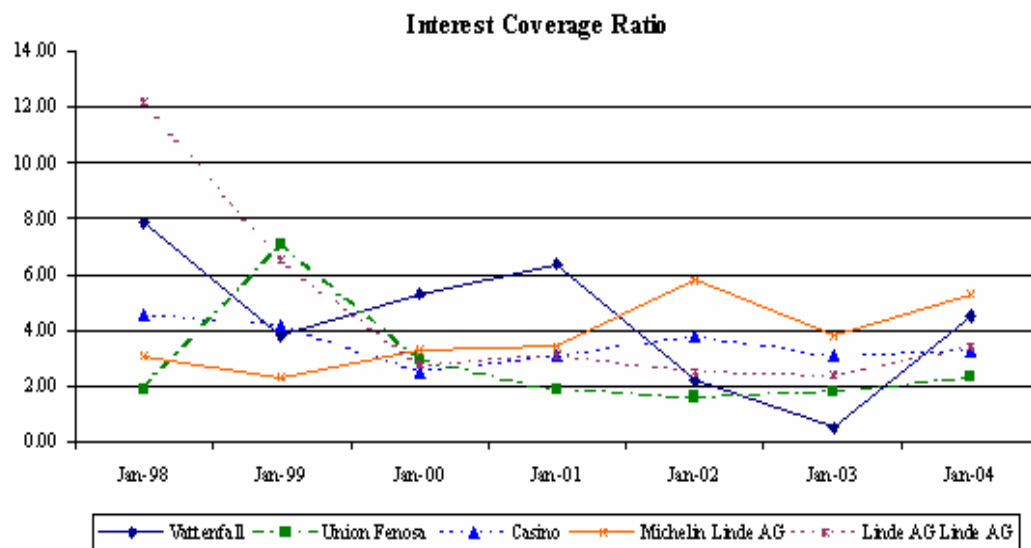


FIGURE 6: INTEREST COVERAGE RATIO COMPARISON. SOURCE MSN MONEY

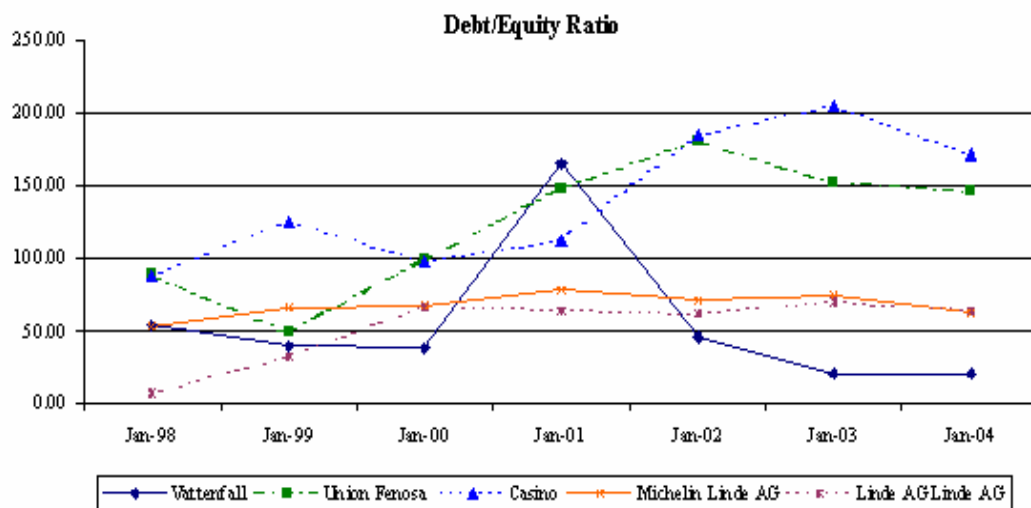


FIGURE 7: DEBT/EQUITY RATIO COMPARISON. SOURCE MSN MONEY

For the corporate issuers, as DONG and Vattenfall, the subordinate contracts are appealing of a way similar to the financial institutions, because they partially get " equity credit " of the rating agencies. In other words, the new gotten capital is not added merely to the debt of the company on its balance, but because of its subordination it is treated also in part like true stockholders' capital. Therefore the

company can fortify its balance sheet here again, while strengthening its leverage level without diluting the shares of the existing shareholders. For the issuers as AXA: while anticipating the refinancing of debts coming to a deadline in 2005 ,in part, these issuance allowed the group to benefit from very favorable conditions and credit margins unprecedented and to improve its liquidity by the extension of the middle maturity of debt and while fortifying the hybrid capital through deeply-subordinates notes.

This characteristic represents a major interest thus for the banks, because the "financial institutions are forced by ratios that limit to a certain multiple of their base stock capital, their capacity to carry risks".

## ***The French Case***

The SME French and European find more and more difficult to finance their growth: the bank credits and IPO become rare. Consequently, the private funds became essential for their growth. For funds of investment, this SME is a source of quality opportunities with appealing assessments. This phenomenon is amplified by the shift between the American and French private stock markets. In addition, the private stock market experimented a considerable increase lately in the middle size of funds and, consequently, in the volume of the investment. The interest of the investment agencies is concentrated on the big LBO transactions and they are not interested anymore by the activities lower than 10 millions euros. Besides, the classic establishments had to concentrate on technology firms, and in refinancing their own portfolios. This is why, again more than before, there is a lack of available capital for companies of the traditional economy with oscillating incomes between 5 and 100 million of euros, and for financial needs between 1 and 10 million euros.

The main difficulties in the obtaining financing through loans of banks are the contraction of banking loans whose margin enlarges between the amount of debt that the banks allow to the SME, and their needs of financing. Not only the debt is more and more difficult to reach there, but the delays and the demanding conditions over

covenants is also a lot bigger. For example, the banks consider that the SME doesn't have enough assets nor capital stock. The other difficulty is the contraction of the IPO's that became rare, because of a combination of difficult economic environment and a trustworthy lack on behalf of the investors.

Due to constrained of a traditional means for increasing capital, as the dilution of the existing shareholders, issuance in a different currency to the euro, the absence of tax-deductibility of the dividend among others, it was urgent an alternative source of financing, and the hybrid products of the DSN, with their intermediate nature between debt and capital, are assimilated by the financial agents with a big expectation

However, the Financial Security Law, executable from August 1st, 2003, has an objective to improve competitiveness and the balance sheet of the financial sector, aiming the modernization of the control = authorities and the protection of the savers at the same time. Thus, this law slightly modified the system of the subordinate notes while allowing these to be repaid even after the loans and participating stocks. They are in the French law " credit notes with negotiable nature"

Explained by the Minister of Economy: *otherwise, the law of financial security of August 1st, 2003 introduced a new category of securities aiming to facilitate and to reinforce the financing equity-debt hybrids, the deeply subordinates*

*stocks. This category of notes can be recognized in capital stock by some agencies of notation, some prudential regulators, while being less expensive. These nature of these measures,, on one hand, are to encourage the strengthening of the capital stocks of the SME and therefore to sustain the employment, and, of another part, to assure the stability of the capital and the direction of the companies in order to prepare to possible relocations".*

The modifications declared by the Financial Security Law in relation to the DSN: "While issuing securities representing obligations on the issuing society, including those giving the right to subscribe or to acquire a underlying security, it can be stipulated that these securities will only be repaid after reimbursement of the other creditors, to the exclusion or including holders of participating loans and participating stocks, in spite of arrangements of the article 228-36 of the present code and those of the articles L 313-13 and following of the monetary Code and financier ."

In particular, the authority of the stock markets specifies that the main distinction between the title subordinated of last rank and the plain obligation is its character of latest rank of obligations grants in the clause of subordination. As result to the debt senior the remuneration is superior. Therefore, the subordinate stocks will be to the last rank be repaid and represent no threat for the company, while being a good source of finance.

Stocks notice themselves in the deference of the payments of the coupons without having negative consequences in the budgetary assessment of the company. In relation to the capital, the distinction between the two instruments is its character of debt.

Three issuances of these instruments of financing have been achieved six months after the enactment of the Law. These three issuances had the objective to reinforce the firms' balance sheet without diluting stock or increasing the debt senior. Two were made by credit unions, the CNCE and the French Development Agency, which took the shape of Euro Medium Term Notes, in a program of issuance that permits the realization of new emissions at all times. The third one done by Michelin, a non-financial company, in the setting of a particular operation. This fact affirms the charm of this product as an instrument to optimize the global leverage of the company, as well as for reinforce the financial structure.

| <b>Issuance of deeply subordinated notes by 01/06/04</b> |                         |                                                      |                                          |
|----------------------------------------------------------|-------------------------|------------------------------------------------------|------------------------------------------|
|                                                          | <b>Michelin</b>         | <b>Caisse nationale des caisses d'épargne (CICE)</b> | <b>Agence française de développement</b> |
| <b>Date</b>                                              | Novembre 2003           | Décembre 2003                                        | Avril 2004                               |
| <b>Montant (millions d'euros)</b>                        | 500                     | 800                                                  | 300                                      |
| <b>Coupon fixe</b>                                       | 6375%                   | 5,25 %                                               | 4605%                                    |
| <b>Coupon variable</b>                                   | Euribor 3 mois + 2,95 % | N.C.                                                 | Euribor 3 mois + 1,32 %                  |
| <i>Source : Banque Magazine n° 659, juin 2004</i>        |                         |                                                      |                                          |

*Table 3: Issuance of Deeply Subordinated Notes. Source Banque Magazine #659*

## ***Conclusion***

In conclusion, the main points of the deeply subordinated notes are their extreme subordination, bringing funds without disrupting the position of the senior debts, their capacity of absorption of losses and risks when the company faces difficulties and finally and their contribution to the financing of the acquisitions.

The company hybrids continue to dominate the performance of the new issuance that hit the credit market. Certainly, the offers of these products are going to enlarge considerably, but as result, the premium of this innovation will decline by a long way. This relatively rare product fundamentally constitutes a tool for the optimization of the capital. There are several reasons therefore to issue deeply subordinated notes either for the financial enterprises or for the non-financial:

1. The improvement of the financial balance sheet and the reinforcement of the financial structure. For this it is necessary to have characteristics of permanence (in the Michelin case 30 years and at the CNCE it hasn't been established) and of extreme subordination.
2. To avoid the dilution of funds of the shareholders.
3. Interruption in the payment of the coupons suspended in the case of deterioration of financial position of the issuer, at the time of an absence of profit or precarious cash flow. At Michelin and the CNCE,

the remuneration for these notes are obligatory after the shareholders received their dividends

4. To optimize the global leverage of the companies as soon as the issuer can arbitrate between the cost of the DSN and the decrease of the rates interest on the rest of its debt.
5. Because they do not compete against other types of debt: in case of liquidation, they serve as cushion, absorbing potential losses that can be absorbed by the common stock.
6. To finance the acquisitions, since the DSN are less expensive than the capital stocks; because they are subject to taxable deductions, and help also to keep the quality of the credit, as it is the case of Vattenfall and Dong. In the case of Vattenfall, it is well known that the company is in search of targets of acquisition. For Dong it is the refinancing of the connections to borrow the first acquired of some actions at Elsam, of Copenhagen and some fields of oil on the sea of the north.
7. To be capable to satisfy the established regulations, these stocks are in conformity with the criteria of the rating agencies and they have an important impact on their notations. The agencies aim to give a notation on an independent basis about the capacity of the issuer to



repay its debt and not to measure its capital stocks.

Finally, for the financial companies, the problem of the limitations in the use of the capital stocks for the financing activities focuses in the optimization of capital in conformity with the regulations and the rankings of the notations.

For the non-financial companies, specialists have a tax-centred debate, discussing the fact that debt-equity hybrids can be abusively used to avoid the fiscal system and therefore, they have no legitimate commercial use or public benefit. However they play an important and genuine role in the risk allocation in investing in a firm and it is necessary to wait until this instrument is widespread and established in the market, to prove their contribution to increase the capital stocks and to improve their WACC.

For the investors, the probability of bankruptcy is nearly the same of that for the debts senior and subordinate, but the effective yield is the compensation for the highest risk of loss of the stocks subordinated by reports to the other types of debts.

In France, they appeared when one of the main weaknesses of the French companies was the lack of capital stock. Two markets are in the horizon: either for banking houses, or for the non financial institutions, from where one will see their development in the future, and in particular after this first experiences with CNCE and Michelin.

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## ***Appendixes***

### ***Appendix 1: Press Release issued by the Basel Committee on October 27, 1998: Instruments Eligible for Inclusion in Tier 1 Capital.***

1. The Basle Committee on Banking Supervision has taken note that over the past years some banks have issued a range of innovative capital instruments, such as instruments with step-ups, with the aim of generating Tier 1 regulatory capital that is both cost-efficient and can be denominated, if necessary, in non-local currency. The Committee has carefully observed these developments and at its meeting on October 21, 1998 decided to limit acceptance of these instruments for inclusion in Tier 1 capital. Such instruments will be subject to stringent conditions and limited to a maximum of 15% of Tier 1 capital.

2. As its starting point, the Committee reaffirms that common shareholder' funds, i.e. common stock and disclosed reserves or retained earnings, are the key element of capital. Common shareholders' funds allow a bank to absorb losses on an ongoing basis and are permanently available for this purpose. Further, this element of capital best allows banks to conserve resources when they are under stress because it provides a bank with full discretion as to the amount and timing of distributions. Consequently, common shareholders' funds are the basis on which most market judgments of capital adequacy are made. The voting rights attached to common stock also provide an important source of market discipline over a bank's management. For these reasons, voting common shareholders' equity and the disclosed reserves or retained earnings that accrue to the shareholders' benefit should be the predominant form of a bank's Tier 1 capital.

3. To provide supervisors and market participants with sufficient information to ensure that the integrity of capital is maintained, the Committee agrees that, as set forth in its recent report "Enhancing Bank Transparency", banks should periodically publicly disclose each component of Tier 1 capital and its main features.

4. In order to protect the integrity of Tier 1 capital, the Committee has determined that minority interests in equity accounts of consolidated subsidiaries that take the form of SPVs should only be included in Tier 1 capital if the underlying instrument meets the following requirements, which must, at a minimum, be fulfilled by all instruments included in Tier 1:

– Issued and fully paid;

- Non-cumulative;
- Able to absorb losses within the bank on a going-concern basis;
- Junior to depositors, general creditors, and subordinated debt of the bank;
- Permanent;
- Neither be secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis bank creditors; and
- Callable at the initiative of the issuer only after a minimum of five years with supervisory approval and under the condition that it will be replaced with capital of same or better quality unless the supervisor determines that the bank has capital that is more than adequate to its risks.

5. In addition, the following conditions have also to be fulfilled:

- The main features of such instruments must be easily understood and publicly disclosed
- Proceeds must be immediately available without limitation to the issuing bank, or if proceeds are immediately and fully available only to the issuing SPV, they must be made available to the bank (e.g. through conversion into a direct issuance of the bank that is of higher quality or of the same quality at the same terms) at a predetermined trigger point, well before serious deterioration in the bank's financial position;
- The bank must have discretion over the amount and timing of distributions, subject only to prior waiver of distributions on the bank's common stock and banks must have full access to waived payments; and
- Distributions can only be paid out of distributable items; where distributions are pre-set they may not be reset based on the credit standing of the issuer.

6. Moderate step-ups in instruments issued through SPVs, as well as in directly issued Tier 1 instruments meeting the requirements set forth in paragraphs 4 and 5, are permitted, in conjunction with a call option, only if the moderate step-up occurs at a minimum of ten years after the issue date and if it results in an increase over the initial rate that is no greater than, at national supervisory discretion, either;

- 100 basis points, less the swap spread between the initial index basis and the stepped-up index basis; or
- 50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

7. The terms of the instrument should provide for no more than one rate step-up over the life of the instrument. The swap spread should be fixed as of the pricing date and reflect the differential in pricing on that date between the initial reference security or rate and the stepped-up reference security or rate.

8. National supervisors expect banks to meet the Basle minimum capital ratios



without undue reliance on innovative instruments, including instruments that have a step-up. Accordingly, the aggregate of issuances of non-common equity Tier 1 instruments with any explicit feature - other than a pure call option -, which might lead to the instrument being redeemed, is limited - at issuance - to 15% of the consolidated bank's Tier 1 capital.

9. Any instruments authorized or issued under existing national rules of Tier 1, which no longer qualify under the above interpretation, will be grand fathered; the same will apply to any issues of such instruments in excess of the 15% limitation.

10. This interpretation will be subject to further review as part of a broader effort already underway to reassess the present framework for evaluating banks' capital adequacy. In this respect, the Committee retains its flexibility to make any changes to this interpretation.

## ***Appendix 2: International Longterm Credit Ratings According to Investment Grade. Fitch.***

**AAA**            *Highest credit quality.* ‘AAA’ ratings denote the lowest expectation of credit risk. They are assigned only in case of exceptionally strong capacity for timely payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.

**AA**            *Very high credit quality.* ‘AA’ ratings denote a very low expectation of credit risk. They indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.

**A**            *High credit quality.* ‘A’ ratings denote a low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to changes in circumstances or in economic conditions than is the case for higher ratings.

**BBB**            *Good credit quality.* ‘BBB’ ratings indicate that there is currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity. This is the lowest investment-grade category.

### ***Speculative Grade***

**BB**            *Speculative.* ‘BB’ ratings indicate that there is a possibility of credit risk developing, particularly as the result of adverse economic change over time; however, business or financial alternatives may be available to allow financial commitments to be met. Securities rated in this category are not investment grade.

**B**            *Highly speculative.* ‘B’ ratings indicate that significant credit risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.

- CCC, CC, C**                      *High default risk.* Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. A 'CC' rating indicates that default of some kind appears probable. 'C' ratings signal imminent default.
- DDD, DD, and D**                      *Default.* Securities are not meeting current obligations and are extremely speculative. 'DDD' designates the highest potential for recovery of amounts outstanding on any securities involved. For U.S. corporatist, for example, 'DD' indicates expected recovery of 50% – 90% of such outstanding, and 'D' the lowest recovery potential, i.e. below 50%.

#### International Short-Term Credit Ratings

A short-term rating has a time horizon of less than 12 months for most obligations, or up to three years for U.S. public finance securities, and thus places greater emphasis on the liquidity necessary to meet financial commitments in a timely manner.

- F1**                      *Highest credit quality.* Indicates the strongest capacity for timely payment of financial commitments; may have an added "+" to denote any exceptionally strong credit feature.
- F2**                      *Good credit quality.* A satisfactory capacity for timely payment of financial commitments, but the margin of safety is not as great as in the case of the higher ratings.
- F3**                      *Fair credit quality.* The capacity for timely payment of financial commitments is adequate; however, near-term adverse changes could result in a reduction to non-investment grade.
- B**                      *Speculative.* Minimal capacity for timely payment of financial commitments, plus vulnerability to near-term adverse changes in financial and economic conditions.
- C**                      *High default risk.* Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon a sustained, favorable business and economic environment.

**D**            *Default.* Denotes actual or imminent payment default.

Notes:

"+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the 'AAA' long-term rating category, to categories below 'CCC', or to short-term ratings other than 'F1'.

'NR' indicates that Fitch IBCA does not rate the issuer or issue in question.

'Withdrawn': A rating is withdrawn when Fitch IBCA deems the amount of information available to be inadequate for rating purposes, or when an obligation matures, is called, or refinanced.

Rating Alert: Ratings are placed on Rating Alert to notify investors that there is a reasonable probability of a rating change and the likely direction of such change. These are designated as "Positive", indicating a potential upgrade, "Negative", for a potential downgrade, or "Evolving", if ratings may be raised, lowered or maintained. Rating Alert is typically resolved over a relatively short period.

**Appendix 3: Financial Performance Indicators for Vattenfall, Union Fenosa, Casino, Michelin and Linde.**

|                             | Vattenfall AG  |                 | Union Fenosa   |                 | Casino         |                 | Michelin       |                 | Linde AG       |                 |
|-----------------------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
| Stock price                 | 44.40          |                 | 27.48          |                 | 59.00          |                 | 48.80          |                 | 61.42          |                 |
| Employees                   | 17,627.00      |                 | 20,798.00      |                 | 118,478.00     |                 | 126,474.00     |                 | 41,383.00      |                 |
| Market Capitalization       | 8.98 Bil       |                 | 8.35 Bil       |                 | 6.60 Bil       |                 | 7.01 Bil       |                 | 7.35 Bil       |                 |
| Earnings/Share              | 1.30           |                 | 3.31           |                 | 4.51           |                 | 3.59           |                 | 2.30           |                 |
| <b>Growth Rates %</b>       | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> |
| Sales (Year vs Year)        | 26.60          | 12.10           | 4.40           | 2.80            | 0.80           | 8.10            | 2.10           | 14.10           | 4.80           | 4.40            |
| EPS (Year vs Year)          | -66.20         | 21.40           | 16.10          | 18.00           | -11.50         | 10.80           | 21.30          | 124.70          | 202.80         | 156.30          |
| Sales (5-Year Avg.)         | 35.71          | 12.17           | 13.50          | 8.82            | 8.18           | 11.55           | 2.65           | 7.45            | 8.75           | 7.26            |
| EPS (5-Year Avg.)           | 31.92          | 23.23           | -7.68          | 12.36           | 13.25          | 13.68           | 27.24          | -2.58           | 2.42           | 12.76           |
| Dividends (5-Year Avg.)     | 1.41           | -11.38          | 8.24           | 9.51            | 10.54          | -1.95           | 11.98          | -21.96          | 2.04           | -27.34          |
| <b>Price Ratios</b>         | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> |
| Current P/E Ratio           | 34.70          | 33.00           | 18.40          | 20.50           | 13.70          | 15.90           | 12.20          | 8.60            | 18.30          | 26.40           |
| Price/Cash Flow Ratio       | 8.10           | 11.40           | 7.70           | 10.00           | 5.30           | 8.40            | 5.50           | 6.00            | 5.40           | 1.90            |
| <b>Profit Margins %</b>     | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> |
| Gross Margin                | 10.10          | 3.40            | 14.10          | 21.20           | 5.70           | 12.40           | 28.20          | 16.80           | 29.10          | 19.30           |
| Pre-Tax Margin              | 3.90           | 209.80          | 9.30           | 14.70           | 3.60           | 3.10            | 5.40           | 2.20            | 5.50           | 0.40            |
| Net Profit Margin           | 2.50           | 156.30          | 6.90           | 9.50            | 2.10           | 2.90            | 3.30           | 0.90            | 2.90           | -1.20           |
| <b>Financial Condition</b>  | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> |
| Debt/Equity Ratio           | 20.40          | 52.10           | 145.97         | 111.42          | 171.45         | -1087.20        | 62.45          | 196.53          | 63.79          | 45.55           |
| Current Ratio               | 1.60           | 64.50           | 0.70           | 0.80            | 1.00           | 1.20            | 1.40           | 1.20            | 1.00           | 2.40            |
| Quick Ratio                 | 1.10           | 64.20           | 0.60           | 0.70            | 0.60           | 0.70            | 0.90           | 0.80            | 0.80           | 1.60            |
| Interest Coverage           | 4.50           | 87.80           | Unknown        | Unknown         | 3.30           | 182.20          | 5.30           | 4.50            | 3.40           | 78.50           |
| <b>Investment Returns %</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> | <b>Company</b> | <b>Industry</b> |
| Return On Equity            | 8.00           | -22.30          | 13.10          | 17.00           | 18.70          | -1.30           | 11.90          | -38.00          | 7.10           | -5.60           |
| Return On Assets            | 2.20           | -2.40           | 5.10           | 6.80            | 4.90           | 5.70            | 4.50           | 1.90            | 4.40           | 1.30            |
| Return On Capital           | 6.60           | -5.90           | 6.50           | 8.60            | 7.80           | 9.80            | 6.70           | -18.10          | 5.60           | 3.60            |

**Appendix 4: Financial Indicators for Vattenfall, Union Fenosa, Casino, Michelin and Linde.**

|        | Vattenfall AG   |                      | Union Fenosa    |                      | Casino          |                      | Michelin        |                      | Linde AG        |                      |
|--------|-----------------|----------------------|-----------------|----------------------|-----------------|----------------------|-----------------|----------------------|-----------------|----------------------|
| Date   | Debt/<br>Equity | Interest<br>Coverage | Debt/<br>Equity | Interest<br>Coverage | Debt/<br>Equity | Interest<br>Coverage | Debt/<br>Equity | Interest<br>Coverage | Debt/<br>Equity | Interest<br>Coverage |
| Dec-04 | 20.40           | 4.50                 | 145.97          | 2.30                 | 171.45          | 3.30                 | 62.45           | 5.30                 | 63.79           | 3.40                 |
| Dec-03 | 20.00           | 0.50                 | 152.12          | 1.80                 | 205.38          | 3.10                 | 74.96           | 3.80                 | 70.37           | 2.40                 |
| Dec-02 | 46.47           | 2.20                 | 181.42          | 1.60                 | 184.85          | 3.80                 | 71.13           | 5.80                 | 61.40           | 2.50                 |
| Dec-01 | 166.00          | 6.40                 | 149.15          | 1.90                 | 112.28          | 3.10                 | 79.08           | 3.40                 | 63.52           | 3.10                 |
| Dec-00 | 38.37           | 5.30                 | 98.55           | 3.00                 | 97.43           | 2.50                 | 67.05           | 3.30                 | 66.37           | 2.80                 |
| Dec-99 | 39.84           | 3.80                 | 50.09           | 7.10                 | 125.35          | 4.20                 | 66.70           | 2.30                 | 33.02           | 6.50                 |
| Dec-98 | 54.04           | 7.90                 | 89.78           | 1.90                 | 88.70           | 4.60                 | 53.13           | 3.10                 | 6.79            | 12.20                |

## Appendix 5: Summary of Recent Deals Using Deeply Subordinated Notes

| Issuer                                          | Dansk Olie & Naturgas                                                                                                                        | Union Fenosa Preferents SA                                                                                                                                                                                                                                  | Vattenfall Treasury AB                                                                                                                                                                                                                                  | Sudzucker International Finance                                                                                                                                                                                                            | Casino Guichard-Perrachon                                                                                           | CGE Michelin                                                                                                                                                                                      | Linde Finance BV                                                                                                       |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Guarantor                                       | NA                                                                                                                                           | Union Fenosa SA                                                                                                                                                                                                                                             | Vattenfall AB                                                                                                                                                                                                                                           | Sudzucker AG                                                                                                                                                                                                                               | NA                                                                                                                  | NA                                                                                                                                                                                                | Linde AG                                                                                                               |
| Sector                                          | Energy/Utilities                                                                                                                             | Utilities                                                                                                                                                                                                                                                   | Utilities                                                                                                                                                                                                                                               | Consumer Products                                                                                                                                                                                                                          | Retail                                                                                                              | Manufacturing                                                                                                                                                                                     | Manufacturing                                                                                                          |
| Country                                         | Denmark                                                                                                                                      | Spain                                                                                                                                                                                                                                                       | Sweden                                                                                                                                                                                                                                                  | Germany                                                                                                                                                                                                                                    | France                                                                                                              | France                                                                                                                                                                                            | Germany                                                                                                                |
| Controlling Shareholder                         | Kingdom of Denmark                                                                                                                           | 6 Spanish banks (22%)                                                                                                                                                                                                                                       | Kingdom of Sweden 100%                                                                                                                                                                                                                                  | Sddeutsche Zuckerruben (56%)                                                                                                                                                                                                               | Group Rally affiliates (67%)                                                                                        | Diverse Shareholder Base                                                                                                                                                                          | 3 German Banks (32%)                                                                                                   |
| Hybrid Security Rating                          | Baa3/BBB-                                                                                                                                    | TBD                                                                                                                                                                                                                                                         | Baa2 / BBB-                                                                                                                                                                                                                                             | Baa2 / BBB-                                                                                                                                                                                                                                | NR / BB+                                                                                                            | Baa3 / BBB-                                                                                                                                                                                       | Baa1 / BBB-                                                                                                            |
| Senior Unsecured Rating                         | Baa1/BBB+                                                                                                                                    | Baa1 / BBB                                                                                                                                                                                                                                                  | A3 / A-                                                                                                                                                                                                                                                 | A3 / A-                                                                                                                                                                                                                                    | NR / BBB                                                                                                            | Baa1 / BBB+                                                                                                                                                                                       | A3 / BBB+                                                                                                              |
| Hybrid-to-senior Ratings Notching               | 38385                                                                                                                                        | TBD                                                                                                                                                                                                                                                         | 2 / 3                                                                                                                                                                                                                                                   | 2 / 3                                                                                                                                                                                                                                      | NR / 2                                                                                                              | 2 / 2                                                                                                                                                                                             | 1 / 2                                                                                                                  |
| Issue Date                                      | 38504                                                                                                                                        | Jun-05                                                                                                                                                                                                                                                      | Jun-05                                                                                                                                                                                                                                                  | Jun-05                                                                                                                                                                                                                                     | Jan-05                                                                                                              | Mar-03                                                                                                                                                                                            | June 2003                                                                                                              |
| Maturity Date                                   | 38504                                                                                                                                        | Perpetual                                                                                                                                                                                                                                                   | Perpetual                                                                                                                                                                                                                                               | Perpetual                                                                                                                                                                                                                                  | Perpetual                                                                                                           | Mar-33                                                                                                                                                                                            | Perpetual                                                                                                              |
| Initial Coupon Currency                         | Euro                                                                                                                                         | 3m EURIBOR + 0.65% euro                                                                                                                                                                                                                                     | 5.25% / Euro                                                                                                                                                                                                                                            | 5.25% / Euro                                                                                                                                                                                                                               | 7.5% / Euro                                                                                                         | 6.375% / Euro                                                                                                                                                                                     | 6.0% / Euro                                                                                                            |
| Initial Coupon Frequency                        | Annual                                                                                                                                       | Quarterly                                                                                                                                                                                                                                                   | Annual                                                                                                                                                                                                                                                  | Annual                                                                                                                                                                                                                                     | Annual                                                                                                              | Annual                                                                                                                                                                                            | Annual                                                                                                                 |
| Size                                            | Benchmark size                                                                                                                               | Up to 750 million euro                                                                                                                                                                                                                                      | 1 billion Euro                                                                                                                                                                                                                                          | 500 million Euro                                                                                                                                                                                                                           | 500 million Euro                                                                                                    | 500 million Euro                                                                                                                                                                                  | 400 million Euro                                                                                                       |
|                                                 | 1,000 years / NC10 at par; 6-9yrs at make-whole bunds +75, declining by 10bp per year                                                        | Perp / NC10                                                                                                                                                                                                                                                 | Perp / NC10                                                                                                                                                                                                                                             | Perp / NC10                                                                                                                                                                                                                                | Perp / NC6                                                                                                          | 30yrs / NC10                                                                                                                                                                                      | Perp / NC10                                                                                                            |
| Maturity/Call Date                              |                                                                                                                                              |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                            |                                                                                                                     |                                                                                                                                                                                                   |                                                                                                                        |
| Step-up after NC ends                           | 100 bps after 10 years                                                                                                                       | 100bps after 10yrs                                                                                                                                                                                                                                          | 100bps after 10yrs                                                                                                                                                                                                                                      | 100bps after 10yrs                                                                                                                                                                                                                         | None see below                                                                                                      | 10bps after 10yrs                                                                                                                                                                                 | 100bps after 10yrs                                                                                                     |
| Coupon after NC period                          | 3m EURIBOR + TBD                                                                                                                             | 3m EURIBOR + 1.65%                                                                                                                                                                                                                                          | 3m EURIBOR + 2.95%                                                                                                                                                                                                                                      | 3m EURIBOR + 3.1%                                                                                                                                                                                                                          | Euro CMS 10 rate + 1% (9% cap)                                                                                      | 3m EURIBOR + 2.95%                                                                                                                                                                                | 3m EURIBOR + 3.375%                                                                                                    |
| Date of Coupon Reset to Floating                | Jun-15                                                                                                                                       | Jun-15                                                                                                                                                                                                                                                      | Jun-15                                                                                                                                                                                                                                                  | Jun-15                                                                                                                                                                                                                                     | Jan-09                                                                                                              | Dec-13                                                                                                                                                                                            | Jul-13                                                                                                                 |
| Trigger for Cash Coupon Deferral or Non Payment | At issuer's option                                                                                                                           | 1. At issuer's option, if there is distributable profit and no ordinary dividends and/or return of equity in last fiscal year.<br>2. Mandatory non-payment if distributions on senior + junior parity securities exceed distributable profit last fiscal yr | 1. At issuer's option, if payments not declared/made on, or repurchases any share capital, jr or parity securities during LTM; 2. Mandatory non-payment, following economic trigger (PFO+Interest Paid)/Interest Expense                                | 1. At issuer's option; 2. Mandatory non-payment, following economic trigger (CF, 6% Sales Revenue)                                                                                                                                         | At issuer's option                                                                                                  | At issuer's option                                                                                                                                                                                | At issuer's option - up to 5 consecutive years                                                                         |
| Cumulative of Deferred or Unpaid Coupons        | Non cash cumulative                                                                                                                          | h cumulatives (PIK structure); 2. Mandatory nccash cumulative; 2. Mandatory non paym-payment is non cumulative but at issue                                                                                                                                 |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                            | Non cumulative                                                                                                      | Cumulative                                                                                                                                                                                        | Cumulative                                                                                                             |
| Alternative Coupons Settlement Mechanism        | 1. Cash from common share issuance; 2. Cash from jr or parity securities sale; 3. Non cash option: further parity securities (PIK structure) | None                                                                                                                                                                                                                                                        | Not known                                                                                                                                                                                                                                               | None                                                                                                                                                                                                                                       | None                                                                                                                | None                                                                                                                                                                                              | None                                                                                                                   |
| Dividend Stopper or Coupon Pusher               | Payouts to parity or junior securities (common equity) not permitted while coupon in deferral                                                | Payouts to parity or junior securities (common equity) not permitted while coupon in deferral                                                                                                                                                               | 1. Optional deferral issuer obliged to pay deferred coupons if distributions made to parity/junior securities;<br>2. Mandatory non-payment issuer will not make distributions on parity/junior securities for 12months after mandatory non-payment date | 1. Optional deferral: issuer obliged to pay deferred coupons if distributions made to parity/junior securities;<br>2. Mandatory non-payment: issuer not prohibited from making payments on securities ranking senior or junior to the bond | Payment of coupon compulsory if dividends paid or share buybacks made 12 months prior to scheduled interest payment | Payment of coupon compulsory if dividends paid or share buybacks made 12 months prior to scheduled coupon payment; accumulated coupons must be paid if dividend declared or shre buyback approved | Issuer obliged to pay deferred coupons if distributions made to parity/junior securities                               |
| Ranking                                         | Junior subordinated*                                                                                                                         | Junior subordinated*                                                                                                                                                                                                                                        | Junior subordinated*                                                                                                                                                                                                                                    | Subordinated                                                                                                                                                                                                                               | Junior subordinated*                                                                                                | Subordinated                                                                                                                                                                                      | Subordinated                                                                                                           |
| Events of Default                               | Breach of obligations                                                                                                                        | None                                                                                                                                                                                                                                                        | Not known                                                                                                                                                                                                                                               | Acceleration, if issuer/guarantor liquidated wound up or dissolved (other than through amalgamation, reorganization or restructuring while solvent)                                                                                        | None                                                                                                                | None                                                                                                                                                                                              | 1. Non-payment other than as provided in bond docs; 2. Insolvency, liquidation; 3. Subordinated guarantee not in force |
| Liquidation Preference                          | Par plus accrued and outstanding payments                                                                                                    | Par plus accrued and outstanding payments                                                                                                                                                                                                                   | Not known                                                                                                                                                                                                                                               | Par plus accrued and arrears                                                                                                                                                                                                               | Par plus accrued                                                                                                    | Par plus outstanding payments                                                                                                                                                                     | Par plus accrued and arrears                                                                                           |
| Moody's Treatment                               | C Basket (50% equity)                                                                                                                        | NA                                                                                                                                                                                                                                                          | D Basket (75% equity)                                                                                                                                                                                                                                   | D Basket (75% equity)                                                                                                                                                                                                                      | NA                                                                                                                  | A Basket (0% equity)                                                                                                                                                                              | B Basket (25% equity)                                                                                                  |
| S&P Treatment                                   | 50% equity                                                                                                                                   | NA                                                                                                                                                                                                                                                          | 60% equity                                                                                                                                                                                                                                              | 50% equity                                                                                                                                                                                                                                 | 50% equity                                                                                                          | Negligible                                                                                                                                                                                        | -30% equity                                                                                                            |

\*Senior only to common equity

Source: Morgan Stanley Research, Company Reports

